



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/916,453	07/27/2001	David J. Green	0325.00487	8728
21363	7590	02/26/2004	EXAMINER	
CHRISTOPHER P. MAIORANA, P.C. 24025 GREATER MACK SUITE 200 ST. CLAIR SHORES, MI 48080			EHICHOYA, FRED I	
			ART UNIT	PAPER NUMBER
			2172	

DATE MAILED: 02/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.	09/916,453	Applicant(s)	GREEN ET AL.
Examiner	Fred I. Ehichioya	Art Unit	2172

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

1) Responsive to communication(s) filed on 17 December 2003.  
 2a) This action is FINAL.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

4) Claim(s) 1 - 20 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) \_\_\_\_\_ is/are rejected.  
 7) Claim(s) 1 - 20 is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

1) Notice of References Cited (PTO-892)  
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  
 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
 Paper No(s)/Mail Date \_\_\_\_\_

4) Interview Summary (PTO-413)  
 Paper No(s)/Mail Date \_\_\_\_\_.  
 5) Notice of Informal Patent Application (PTO-152)  
 6) Other: \_\_\_\_\_.

**DETAILED ACTION**

***Response to Arguments***

1. Claims 1 – 20 are pending in this office action.
  
2. Applicants argue:
  - (a) "Schmitz does not appear to teach or suggest a step or storing at least one of a plurality of parameters, that define a program for a programmable logic device, in a non-programming field of a file suitable for programming the programmable logic device" (Page 10, Para 1).
  - (b) "The Office Action has failed to establish *prima facie* obviousness for lack of evidence of storage medium" (Page 10, Para 2).
  - (c) Schmitz does not appear to teach or suggest a step of bracketing a non-programming field of a file with a pair of delimiters" (Page 12, Para 1).

Regarding the arguments (a) and (c): applicants' arguments are moot in view of the new ground(s) of rejection with USPN 5,396,505.

Regarding the argument (b): *a prima facie case of obviousness is established when the teachings from the prior art itself would appear to have suggested the claimed subject matter to a person of ordinary skill in the art. Once such a case is established, it is incumbent upon appellant to go forward with objective evidence of unobviousness. In re Fielder, 471 F.2d 640, 176 USPQ 300 (CCPA 1973).*

The examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art.

See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

The recitation "storage medium" has not been given patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

Schmitz teaches a physical database, which is used to store information characterizing the selected programmable logic device (see column 35, lines 35 - 44) and Schultz teaches storage of clock frequency in memory (see column 21, lines 21 - 17); In this case, the combination of Schmitz and Schultz fairly suggest applicants claimed invention.

3. Applicant's arguments with respect to claims 1 - 20 have been considered but are moot in view of the new ground(s) of rejection.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 1, 5, 8 – 11, 15, and 18 - 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,128,871 issued to Nicholas A. Schmitz (hereinafter “Schmitz”) in view of U.S. Patent 5,396,505 issued to Jon C. Freeman et al (hereinafter “Freeman”).

Regarding claim 1, Schmitz teaches a method of generating a file suitable for programming a programmable logic device, the method comprising the steps of:

(A) generating a programming item from a plurality of parameters that define a program for said programmable logic device (column 1, lines 56 – 67 and column 6, lines 20 – 22);

(B) storing said programming item in a programming field of said file in response to generating (column 6, lines 8 – 24); and

Schmitz does not explicitly disclose non-programming field.

Freeman discloses (C) storing at least one of said parameters in a non-programming field of said file (column 6, lines 44 – 67 and column 7, lines 23 – 32).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of Freeman with the teaching of Schmitz wherein writing error checking signal are the parameters stored in non-programmable field. The motivation is that the error checking signal is used to check whether the data fields generated during a particular communication are allowed or forbidden by a communication protocol.

Regarding claims 5 and 15, Freeman teaches the steps of:

Generating an error detection item (column 1, lines 48 – 54; Freeman discloses error checking signal as “error detection item”); and

storing said error detection item in a second non-programming field of said file (column 6, lines 44 – 57 and column 7, lines 23 - 32).

Regarding claims 8 and 18, Schmitz teaches the step of storing an identification item configured to identify said programmable logic device in a second on-programming field of said file (column 2, lines 44 – 57).

Regarding claims 9 and 19, Schmitz teaches the step of bracketing said non-programming field with a pair of delimiters (Fig.26; column 18, lines 26 – 31 and column 30, lines 9 – 13).

Regarding claim 10, Schmitz teaches bracketing (column 30, lines 9 – 13)

Schmitz does not explicitly teach non-programmable field.

Freeman teaches generating an error detection item (column 1, lines 48 – 54; Freeman discloses error checking signal as “error detection item”);  
storing said error detection item is a second non-programming field of said file (column 6, lines 44 – 57);

storing another of said parameters in a third non-programming field of said file (column 7, line23 – 25 and column 8, lines 22 - 25);

storing an identification item in a fourth non-programming field of said file (Fig.3; column 3, lines 30 – 44 and column 5, lines 5 – 8; “M” rows represents the number of data fields); and

bracketing a combination of said non-programming field, said second non-programming field, said third non-programming field, and said fourth non-programming field with a pair of delimiters (column 3, lines 42 - 46).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of Freeman with the teaching of Schmitz wherein bracketing combines the entries of second, third, and fourth of non-programmable fields. The motivation is that the bracketing specifies the required fields for processing.

Claim 11 is essentially the same as claim 1, except that it sets forth the claim invention as a storage medium for use in a computer to generate a file rather than a method of generating a file and therefore rejected for the same reason as applied herein above.

Claim 20 is essentially the same as claim 1, except that it sets forth the claim invention as a system rather than a method of generating a file and therefore rejected for the same reason as applied herein above.

6. Claims 2, 3, 4, 6, 7, 12, 13, 14, 16 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schmitz in view of Freeman and further in view of U.S. Patent 6,255,848 issued to David P. Schultz et al (hereinafter "Schultz").

Regarding claims 2 and 12, Schmitz and Freeman disclose the claimed subject matter as discussed in claims 1 and 11 respectively. Freeman discloses a non-

programmable field (column 7, lines 23 – 32). Schmitz or Freeman does not explicitly teach storing a frequency parameter.

However, Schultz teaches storing is storing a frequency parameter in said non-programming field (see column 20, lines 36 – 67 and column 21, lines 1 – 6).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of Schultz with the teaching of Schmitz and Freeman wherein control parameters and clock frequency are stored in several data structures in the main memory. The clock frequency is the frequency parameter. The motivation is that clock frequency determines the order of bit streams, which is very important in the effective operation of the programmable logic device.

Regarding claims 3 and 13, Freeman teaches the step of second storing one of said parameters in a second non-programming field of said file (column 7, lines 23 – 32)

Regarding claims 4 and 14, Schmitz and Freeman disclose the claimed subject matter as discussed in claims 3 and 13 respectively. Freeman discloses a second non-programmable field (column 7, lines 23 – 36). Schmitz or Freeman does not explicitly teach storing a frequency parameter.

However, Schultz teaches said second storing is storing a frequency parameter in said second non-programming field (see column 21, lines 2 - 6).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of Schultz with the teaching of Schmitz and Freeman wherein control parameters and clock frequency are stored in several data structures in the main memory. The clock frequency is the frequency parameter. The motivation is that clock frequency determines the order of bit streams, which is very important in the effective operation of the programmable logic device.

Regarding claims 6 and 16, Schultz teaches error detection item is a cyclic redundancy check checksum (see column 3, lines 31 – 40 and column 14, lines 11 – 16).

Regarding claims 7 and 17, Schultz teaches cyclic redundancy check checksum is configured to detect a bit swap within said file (see column 14, lines 29 – 38).

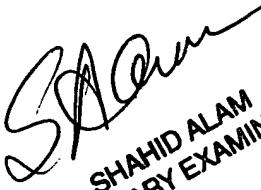
### ***Conclusion***

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fred I. Ehichioya whose telephone number is 703-305-8039. The examiner can normally be reached on M - F 8:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John E. Breene can be reached on 703-305-9790. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Fred I. Ehichioya  
Examiner  
Art Unit 2172  
February 11, 2004



SHAHID ALAM  
PRIMARY EXAMINER